

Work Order ID 61521

Monday, August 30, 2010 10:17:15 AM

Page 1

Item ID: D3414-041

Accept

Revision ID:

Item Name: Lug Assembly

Start Date: 8/30/2010 Start Qty: 24.00

Required Date: 9/3/2010 Req'd Qty: 24.00



Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: mf Date: 10-8-30 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3414	Rev C								
100		0.00							
									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D3414-1 Dwg Rev: <u>C</u> Prog Rev: <u>C</u> 2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
									
QC	Memo	0.00							
Quality Control									

10-8-31

(35)

10-8-31

BLUE x 8

split blue only

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61521

Monday, August 30, 2010 10:17:15 AM

Page 2

Item ID: D3414-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Lug Assembly

Start Date: 8/30/2010 Start Qty: 24.00

Cust Item ID:

Required Date: 9/3/2010 Req'd Qty: 24.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

130

0.00



Brake NC

Memo

0.00

Brake NC

1-Deburr

2-Form using DT8254 as per Dwg D3414

140

0.00



Large Fab

Memo

0.00

Large Fab

1- Weld using location Jig DT8484 as per Dwg D3414

A/R S.S. welding rod Batch: M101744counted
35

35

EL 10-9-14 28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61521

Monday, August 30, 2010 10:17:15 AM



Page 3

Item ID:	D3414-041	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Lug Assembly					
Start Date:	8/30/2010	Start Qty: 24.00		Cust Item ID:		
Required Date:	9/3/2010	Req'd Qty: 24.00		Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds Memo	0.00 0.00							
160 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							
165 SprayPaint Spray Painting	Spray Painting per QSI005 4.2 Memo Prime B 114424 Spray paint Delfect Blue B 115509 Clear Delfect B 115506	0.00 0.00							

FE
2 10.09.15 8 4

8/30/15

TS

ml 10 09 24 8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61521

Monday, August 30, 2010 10:17:15 AM



Page 4

Item ID: D3414-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Lug Assembly

Start Date: 8/30/2010 Start Qty: 24.00



Cust Item ID:

Required Date: 9/3/2010 Req'd Qty: 24.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

175

QC14- Inspect Spray Paint

0.00



QC

Memo

0.00

Quality Control

85 10-09-27 (X2)

190

Identify as per dwg & Stock Location: 420

0.00



Packaging

Memo

0.00

Packaging

C 10/9/2 (8)

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/27 (X2)
MP
10.927

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, August 30, 2010 10:17:14 AM

Page 1

Work Order ID: 61521

Parent Item: D3414-041

Parent Item Name: Lug Assembly

Start Date: 8/30/2010

Required Date: 9/3/2010

Start Qty: 24.00

Required Qty: 24.00

Comments: IPP A05.09.13 New issue KJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S12GA

Purchased

No

100

sf

204.1000

0.155

3.72

5.5

HB(6-8-31)



304/316 0.100" Sheet

Location

Loc Qty

Loc Code

MAT19

204.1

112290

15.1

112611

29

113062

128

113077

32

112290

(35)

D3414-3

Manufactured

No

140

Each

12.0000

1

24



Lug

Location

Loc Qty

Loc Code

WA

12

61240

12

8

EL 10-9-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 61521
Description: Lug Bracket		Part Number: D3414-1
Inspection Dwg: D3414	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.313	+0.006/-0.001	.313	*		V 1802	
1.19	+/-0.030	1.179	✗		"	
1.00	+/-0.030	1.011	✗		"	
3.38	+/-0.030	3.379	✗		"	
5.350	+/-0.010	5.349	✗		"	
6.23	+/-0.030	6.227	✗		"	
2.500	+/-0.010	2.499	✗		"	
0.37	+/-0.030	.369	✗		"	
0.100	+/-0.010	.103	✗		"	

Measured by: HB	Audited by: S	Prototype Approval: N/A
Date: 10-8-31	Date: 10/08/31	Date: N/A

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue P/O D3414-041	KJ/DD	
B	09.05.27	Dimensions updated per Dwg Rev B	KJ	
C	09.10.16	Dwg Rev updated to Rev C	KJ	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

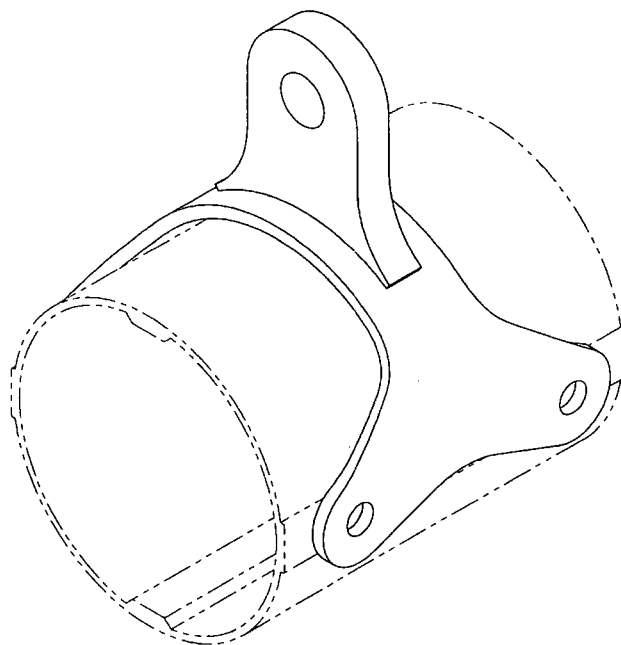
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM No.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D3414-041	LUG ASSEMBLY
2	1	D3414-1	LUG BRACKET
3	1	D3414-3	LUG

61521



D3414-041 LUG ASSEMBLY

RELEASED
5/16/2016

C	BREAK SHARP EDGES FOR .3 NOW 0.030-0.060 WAS 0.010-0.030 (ZN A7-3)	CP	09.06.17
B	DRAWING REDRAWN IN SOLIDWORKS WITH CURRENT STANDARDS AND TRANSFERRED TO "B" SIZE BORDER. FLAT PATTERN FOR .1 INCREASED IN LENGTH TO PREVENT FOULING AT INSTL (SEE PAR188). FLAT SPOTS REMOVED FROM .1 (PART NOW "U" SHAPED) FOR EASE OF MANUFACTURE. B7-3 ADDED TOLERANCE TO 3.230 DIM. C2-3 1.12 DIM WAS 1.20.	AJS	08.09.23
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CP		
CHECKED	2	DRAWING NO.	REV. C
MFG. APPR.	1	D3414	SHEET 1 OF 3
APPROVED	1	TITLE	SCALE
DE APPR.	1	LUG ASSEMBLY	NTS
DATE	09.06.17	<small>COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3414-041" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.52 lbs

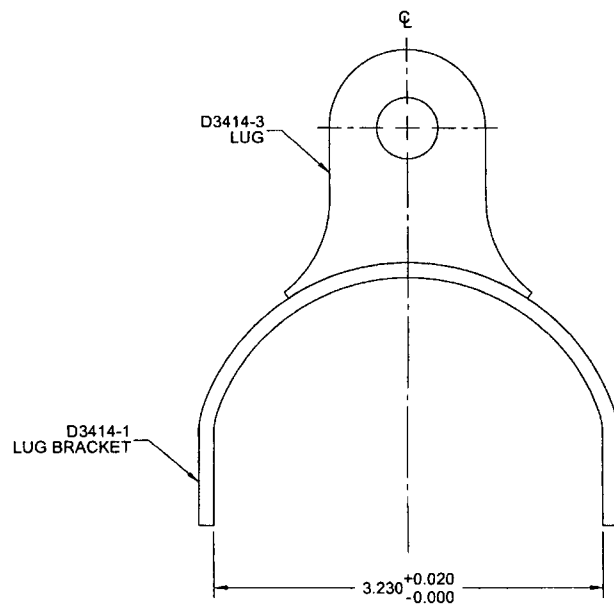
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

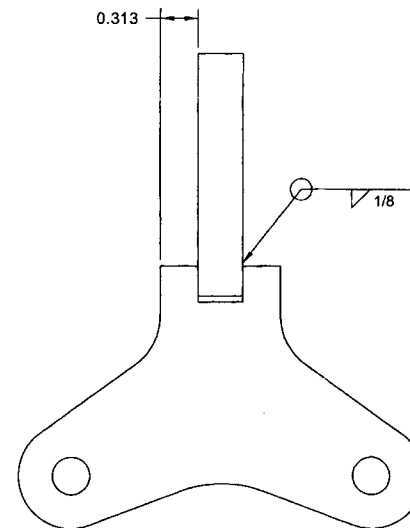
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3414-041 LUG ASSEMBLY



#61521

RELEASED
09/18/17

DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CP		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3414	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		LUG ASSEMBLY	NTS
DATE	09.06.17	<small>COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

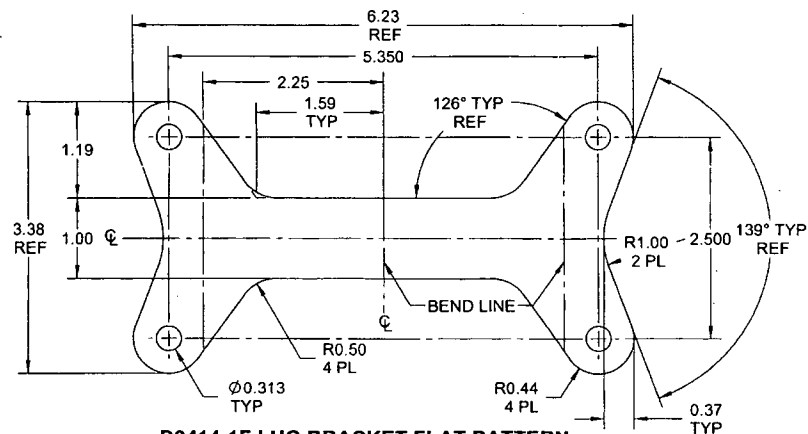
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

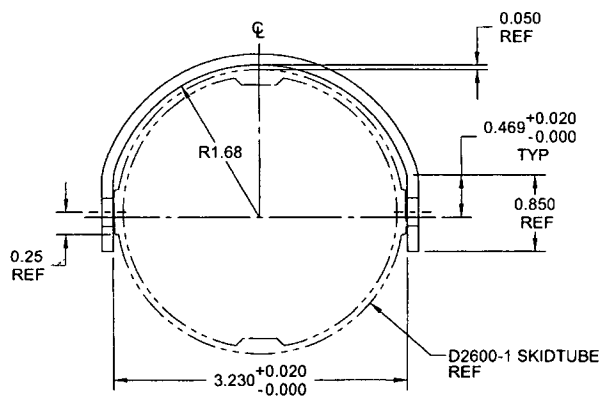
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3414-1F LUG BRACKET FLAT PATTERN



D3414-1 LUG BRACKET

NOTES:

1) MATERIAL: -1: AISI 304/316 STAINLESS STEEL SHEET, 12 GAUGE (0.100 THICK)
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S12GA

-3: AISI 304/316 STAINLESS STEEL PLATE
PER MIL-S-5059 (ANNEALED) 2B FINISH OR AMS 5513/5524
REF. DART SPEC. M304S

2) FINISH: N/A

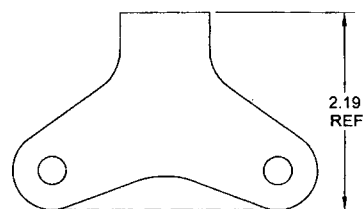
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

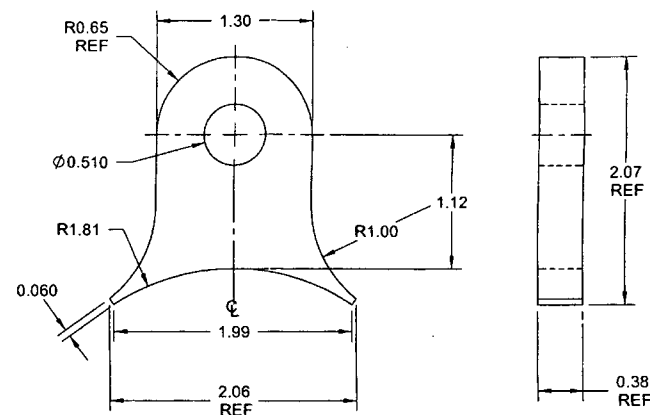
5) BREAK SHARP EDGES: -1: 0.010 TO 0.020 MAX
-3: 0.030 TO 0.060 MAX

6) IDENTIFICATION: N/A

7) WEIGHT: N/A



SIDE VIEW FOR REF ONLY



D3414-3 LUG

RELEASED
09/06/17

DESIGN	CP	DART AEROSPACE LTD	
DRAWN	CP	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3414	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		LUG ASSEMBLY	NTS
DATE	09.06.17	COPYRIGHT © 2005 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries